

WHAT IS CLAIMED IS:

1. A video encoding method for video encoding apparatus to implement backward interframe prediction from a temporally subsequent frame, the video encoding method comprising:

outputting information indicating that an option to eliminate use of a decoded image of the temporally subsequent frame was chosen.

2. A video decoding method for video decoding apparatus to implement backward interframe prediction from a temporally subsequent frame, said video decoding method comprising:

in conjunction with input of information for eliminating use of a decoded image of the temporally subsequent frame, avoiding outputting the decoded image of the frame on the basis of said information.

3. A video encoding apparatus for implementing backward interframe prediction from a temporally subsequent frame, said video encoding apparatus being configured to:

output information indicating that an option to eliminate use of a decoded image of the temporally subsequent frame was chosen.

4. The video encoding apparatus according to Claim 3, wherein said information is information providing an instruction to eliminate use of every frame, for the decoded image of said temporally subsequent frame.

5           5.     The video encoding apparatus according to Claim 3, wherein said information is information providing an instruction to eliminate use of every frame not used as a reference frame for backward prediction, for the decoded image of said temporally subsequent frame.

          6.     The video encoding apparatus according to Claim 3, wherein said information includes information indicating an output time about a decoded image of a frame use of which is eliminated.

10           7.     A video decoding apparatus for implementing backward interframe prediction from a temporally subsequent frame, said video decoding apparatus being configured to:  
              in conjunction with input of information for eliminating use of a decoded image of the temporally subsequent frame, avoid outputting the decoded image of the frame on the basis of said information.

          8.     The video decoding apparatus according to Claim 7, wherein said information is information providing an instruction to eliminate use of every frame, for the decoded image of said temporally subsequent frame.

20           9.     The video decoding apparatus according to Claim 7, wherein said information is information providing an instruction to eliminate use of every frame not used as a reference frame for backward prediction, for the decoded image of said temporally subsequent frame.

          10.    The video decoding apparatus according to Claim

7, wherein said information includes information indicating an output time about a decoded image of a frame use of which is eliminated.

5           11.    A video encoding program for video encoding apparatus as a computer for implementing backward interframe prediction from a temporally subsequent frame, said video encoding program letting the video encoding apparatus substantialize:

10               a function of outputting information indicating that an option to eliminate use of a decoded image of the temporally subsequent frame was chosen.

15           12.    A video decoding program for video decoding apparatus as a computer for implementing backward interframe prediction from a temporally subsequent frame, said video decoding program letting the video decoding apparatus substantialize:

20               a function of, in conjunction with input of information for eliminating use of a decoded image of the temporally subsequent frame, avoiding outputting the decoded image of the frame on the basis of said information.

13.    A video encoding apparatus comprising:

input means for effecting input of an image as a target for encoding;

25           encoding means for encoding the image to generate encoded data;

image storage means for storing an image regenerated

after encoded by the encoding means; and

buffer management means for managing every image stored  
in the image storage means,

wherein, on the occasion of encoding an image encoded  
5 without reference to any other image, the buffer management  
means outputs along with the encoded data, a flag indicating  
whether use is eliminated of every image previously stored  
in the image storage means.

14. The video encoding apparatus according to Claim  
10 13, wherein the encoding means implements backward interframe  
prediction from a temporally subsequent frame, and

wherein, on the occasion of encoding the image encoded  
without reference to any other image, the buffer management  
means deletes a decoded image of every temporally subsequent  
15 frame previously stored in the image storage means.

15. A video decoding apparatus comprising:

input means for effecting input of image data containing  
encoded data of an encoded image, and an image output  
instruction flag added to the encoded data;

20 decoding means for decoding the encoded data to generate  
a regenerated image;

image storage means for storing the regenerated image;  
and

buffer management means for managing every regenerated  
25 image stored in the image storage means,

wherein the buffer management means deletes every image

stored in the image storage means, in accordance with the image output instruction flag corresponding to an image encoded without reference to any image stored in the image storage means.

5           16.     The video decoding apparatus according to Claim 15, wherein where the image output instruction flag is "0," use is eliminated of every reference image in a buffer, and where the flag is "1," every reference image and every output queueing image in the buffer are deleted.

10           17.     A video encoding method comprising:  
              an input step wherein a video encoding apparatus effects input of an image as a target for encoding;

              an encoding step wherein the video encoding apparatus encodes the image to generate encoded data;

15           an image storage step wherein the video encoding apparatus stores an image regenerated after encoded in the encoding step, into image storage means; and

              a buffer management step wherein the video encoding apparatus manages every image stored in the image storage means,  
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              wherein in the buffer management step, on the occasion of encoding an image encoded without reference to any other image, the video encoding apparatus outputs along with the encoded data, a flag indicating whether use is eliminated  
25 of every image previously stored in the image storage means.

              18.     A video decoding method comprising:

an input step wherein a video decoding apparatus effects input of image data containing encoded data of an encoded image, and an image output instruction flag added to the encoded data;

5           a decoding step wherein the video decoding apparatus decodes the encoded data to generate a regenerated image;

an image storage step wherein the video decoding apparatus stores the regenerated image into image storage means; and

10           a buffer management step wherein the video decoding apparatus manages every regenerated image stored in the image storage means,

wherein in the buffer management step, the video decoding apparatus deletes every image stored in the image storage means, in accordance with the image output instruction flag corresponding to an image encoded without reference to any image stored in the image storage means.

15           19. A video encoding program for letting a video encoding apparatus substantialize:

20           a function of effecting input of an image as a target for encoding;

a function of encoding the image to generate encoded data;

25           a function of storing an image regenerated after encoded, into image storage means;

a function of managing every image stored in the image

storage means; and

5 a function of outputting along with the encoded data,  
a flag indicating whether use is eliminated of every image  
previously stored in the image storage means, on the occasion  
of encoding an image encoded without reference to any other  
image.

20. A video decoding program for letting a video  
decoding apparatus substantialize:

10 a function of effecting input of image data containing  
encoded data of an encoded image, and an image output  
instruction flag added to the encoded data;

a function of decoding the encoded data to generate  
a regenerated image;

15 a function of storing the regenerated image into image  
storage means;

a function of managing every regenerated image stored  
in the image storage means; and

20 a function of deleting every image stored in the image  
storage means, in accordance with the image output  
instruction flag corresponding to an image encoded without  
reference to any image stored in the image storage means.